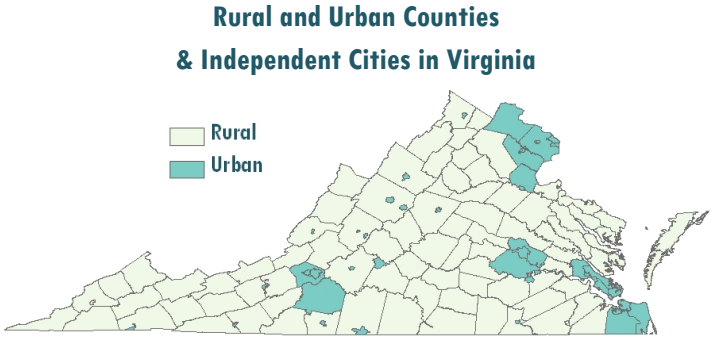
Rural Communities

Updated October 2011

Virginia consists of 95 counties and 39 independent cities; 65% of these locations are classified as rural*. Approximately one-third of the state's estimated 2009 population resides in these rural areas.



Rural residents in the US face a number of additional health care challenges compared to their urban counterparts, including geographic isolation, poverty, limited job opportunities, inadequate education, stigma toward those who engage in risky behaviors or have been diagnosed with HIV or AIDS, and close-knit social networks which make it difficult to access confidential HIV testing or attain prevention services. These barriers prevent many people living in rural areas from seeking HIV testing, counseling, and care, as well as related services such as drug and alcohol treatment and mental health counseling (Hall, 2005; RCAP, 2009).

The Centers for Disease Control and Prevention (CDC) reported that in 2009, the rate of HIV diagnoses among adults and adolescents in metropolitan areas was 3 times higher than that of nonmetropolitan residents - 26.7 versus 8.9 cases per 100,000 population†. Blacks accounted for the largest percentage of infections in 2009 regardless of the population of the area of residence at diagnosis. But in metropolitan areas with population of 500,000 or more, Hispanics/Latinos represented 19% of the diagnoses while Whites accounted for 26%. In nonmetropolitan areas with less than 50,000 people, only 10% of HIV diagnoses were among Hispanics/Latinos and a larger proportion (36%) were represented by Whites (CDC, 2011).

Compared to those living in metropolitan areas, HIV infection among rural residents nationwide had a lower proportion attributed to men who have sex with men (MSM), and higher proportions of those infected through heterosexual contact, injection drug use (IDU), and MSM with a history of injection drug use (MSM-IDU) (CDC, 2011).

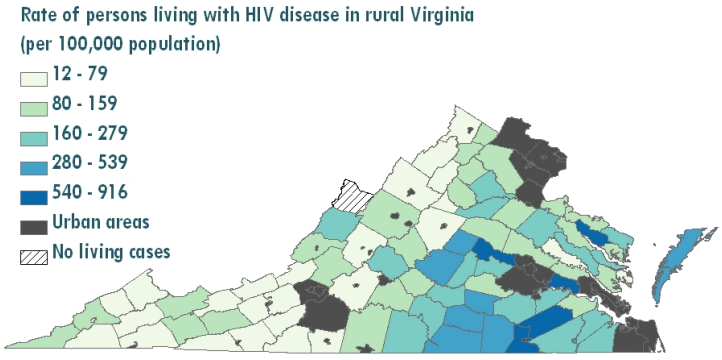
AIDS diagnoses in 2009 follow similar trends: Whites comprised a larger percentage of rural diagnoses compared to Whites in metropolitan areas while Hispanics accounted for a smaller percentage among rural residents. The rate of AIDS diagnoses for rural regions in Southern states has been higher than that of other regions in the country (Hall, 2005). The 2009 AIDS diagnosis rate in rural Southern states was 8.8 per 100,000 population, significantly higher than the other three geographic census regions (CDC, 2011). In 2006, 67% of all new rural AIDS cases were located in the rural South and there were more AIDS-related deaths in these areas than any other parts of the US (RCAP, 2009).

A contributing factor for this discrepancy is that many areas with large rural components in the South have historically been poor and medically underserved, including the Appalachian Region, the Mississippi Delta, the Southeast Region, and the US-Mexico Border (Hall, 2005). Virginia encompasses localities within two of these geographically defined regions: Appalachian and the Southeast. The 2000 HIV diagnosis rate for the Southeast Region had been 24 per 100,000 population, the highest even among these four disadvantaged areas; the rate of new AIDS diagnosis in 2000 was 15 per 100,000 for Southeast and 5 per 100,000 for Appalachian (Hall, 2005).

HIV/AIDS PREVALENCE

Of the 22,257 people living with HIV/AIDS (PLWHA) at the end of 2009 in Virginia, approximately 18% (3,979) resided in rural Virginia. Among this population, nearly 53% had progressed to AIDS. Seventy-five percent of rural PLWHAs were male, and 60% were Blacks.

People Living with HIV Disease in Rural Virginia by Locality, 2009



HIV DISEASE DIAGNOSES

Between 2005 and 2009, 781 HIV disease cases were diagnosed among residents in rural Virginia, representing 15% of the state's total new diagnoses during this 5-year period. The majority of this population was male (77%).

Non-Hispanic Blacks accounted for 56% of new HIV diagnoses, followed by White Virginians at 35% and Hispanics/Latinos at nearly six percent. Among men, most were attributed to MSM or MSM-IDU (75%); the second most common mode of HIV transmission was heterosexual contact (14%), followed by IDU at 10%. The majority of women living in rural Virginia were infected through sex with men (85%), while the remaining diagnoses were attributed to injection drug use^.

REFERENCES

CDC (2011). "HIV Surveillance in Urban and Nonurban Areas." PowerPoint presentation, updated July, 2011. Accessed October 2011: http://www.cdc.gov/hiv/topics/surveillance/resources/slides/urban-nonurban/slides/urban-nonurban.pdf

Hall, I. *et al.* (2005). HIV in predominantly rural areas of the United States. *Health Status: HIV/AIDS* Summer: 245-253.

Rural Center for AIDS/STD Prevention (2009). "HIV/AIDS in Rural America: Challenges and Promising Strategies." Accessed October 2011: http://www.indiana.edu/~aids/factsheets/factsheet23.pdf

*"Rural" is defined in Virginia's State Rural Health Plan, published in 2008 as a result of a collaborative effort led by the Virginia Department of Health Office of Minority Health and Health Equity (OMHHE) and the Virginia Rural Health Association (VRHA). The group considered various commonly used rural definitions and recommended the Isserman rural definition for the purpose of the Plan. The Isserman definition classifies all counties and county-equivalents into 4 categories - rural, mixed rural, mixed urban, and urban. For the purpose of the Epidemiologic Profile, "rural" and "mixed rural" counties and county-equivalents in Virginia are combined to indicate rural Virginia in HIV data analysis, maps, and narratives; similarly, "urban" and "mixed urban" areas are combined to represent urban Virginia.

For more, please refer to Appendix D of the State Rural Health Plan - "Defining Rural": http://www.va-srhp.org/docs/plan/11-appendix-d.pdf

†The CDC classifies rural and urban areas using the Office of Management and Budget (OMB) definition, which is slightly different from the Isserman definition used for Virginia.

^Transmission category data presented here are not actual cases but estimates calculated using the CDC provided multiple imputation procedure for cases reported without an identified or reported risk.